### <u>Information Request DTE-2-1</u>

#### Request:

Please refer to the e-mail from Carlos Gavilondo dated September 12, 2003, which is included in Attachment B to the Company's response to DTE 1-3. Please explain how the transmissions upgrades would "obviate the need for investing in RMR contracts." What would be the benefit of obviating the need for these contracts? Is there a deadline by which ISO would need to know that the proposed project would be operational that would influence its signing of reliability must-run contracts?

### Response:

In composing the referenced September 12, 2003, e-mail message, it was Mr. Gavilondo's understanding that transmission upgrade projects being proposed by National Grid USA and NSTAR Electric for the Northeast Massachusetts/Boston ("NEMA/Boston") reliability zone had the potential for increasing the power import capability into NEMA/Boston, thereby reducing the need to rely on the Salem Harbor Station for local area reliability purposes. To the extent that local area reliability is not dependent on Salem Harbor Station, it "may obviate the need for investing in the RMR [reliability must-run] contracts . . . . " The benefit of avoiding new RMR contracts is essentially the cost savings to customers from avoiding having to finance the environmental upgrades. Estimates contemporaneous with the September 12 e-mail placed the cost of the RMR contracts at approximately \$175 million. Increased transmission capacity into the region may also provide the opportunity for greater competition among suppliers resulting in a lower price for electricity in the NEMA/Boston area.

National Grid is unaware that any deadline exists for the ISO with respect to the Salem Harbor Station RMR contracts.

Prepared by or under the supervision of: Carlos Gavilondo and Peter T. Zschokke

#### Information Request DTE 2-2

### Request:

Please refer to DTE 1-10. To what level of output would Units 1 through 3 need to be "backed down" to produce the needed amount of reactive support? What would be the consequences of backing down the units to this level? How, specifically, would reliability be negatively affected, and when would any negative effects first be expected? Please state your assumptions regarding peak load, season, year(s) of analysis, other transmission upgrades in service, etc.

### Response:

Based on the information in table contained in DTE-1-10, a backdown of Unit 1 from Normal Claimed Capability to Half Load would be sufficient to produce the extra 15 MV Ar required. From the information available in the NX-12D used to answer DTE-1-10, this would be approximately 30 MW. Units 2 and 3 would not need to be backed down in that case. Units 2 and 3 would not have to be backed down to Half Load to produce the needed amount of Reactive power. The exact amount of backdown for Units 2 and 3 cannot be determined from the data available to NEP and provided in DTE 1-10.

The consequences of this backdown would depend on system conditions at the time of the need. The analysis assumed a summer peak load expected for the year 2006. If the North Shore area were operating at its import limit, then the 30 MW backdown would have to be made up within the North Shore interface or risking overloading transmission elements if the worst contingency occurred. If the load level were less than peak and/or the area were not operating at or near its import limit, the backdown might not produce any consequences.

### <u>Information Request DTE 2-3</u>

# Request:

In the absence of the proposed project, what would be the most feasible alternatives for offsetting the amount of power that would be lost by backing down Units 1 through 3, as described in DTE 1-10? In light of these alternatives, how would the proposed project compare with backing down Units 1 through 3?

### Response:

The alternatives could include the following:

- 1. redispatch of the North Shore area generation to recover the backdown MW, if such amounts were available
- 2. call on an equivalent amount of the area's "quick-start" generation in the event of a contingency occurring to back off loading on the area's transmission
- 3. drop 30 MW of load on occurrence of the worst contingency

Normally, <u>all</u> generation in the North Shore area runs on a peak-load day. Alternatives 1 and 2 would require the running of <u>additional</u> generation in the area. Alternatives 1 and 2 are not deemed reliable because the requisite generation may not be available when needed.

The project would be preferable to alternative 3 from the perspective of serving customer load. The project would definitely provide the required voltage support within the import-constrained area.

Prepared by or under the supervision of: John W. Martin, P.E.

## <u>Information Request DTE 2-4</u>

### Request:

What is the estimated cost of the proposed project?

# Response:

The study estimate cost for the proposed capacitor bank project is \$1,800,000. Study estimates are developed with only a conceptual understanding of the project. They are prepared using historical cost data, data from similar projects and other stated assumptions of the Project Engineer. The accuracy of study estimates is expected to be  $\pm$ 0. Reference Attachment A entitled Project Estimating Guide.